IN THE CLAIMS

1.(Original) A multi-tasking bootstrap system comprising:

a bus for communicating information;

a non-volatile memory communicatively coupled to said bus, said non-volatile memory for storing boot up information including information associated with an interrupt vector table; and

a processor communicatively coupled to said non-volatile memory, said processor configured to retrieve said boot up information from said non-volatile memory, including retrieving said information associated with said interrupt vector table, and perform multi-tasking operations while accessing serial presence detect information during boot up operations prior to completing volatile memory initialization.

2. (Original) A multi-tasking bootstrap system of Claim 1 wherein said non-volatile memory is a read only memory.

3. (Original) A multi-tasking bootstrap system of Claim 1 wherein said bus is a system management bus.

4. (Original) A multi-task bootstrap system of Claim 3 wherein communications via said system management bus are controlled by a system management bus controller operating in an interrupt driven mode.

5. (Original) A multi-tasking bootstrap system of Claim 3 wherein said system management bus communicates serial presence detect data in accordance with directions from a system management bus controller operating in an interrupt driven mode.

6. (Original) A multi-tasking bootstrap system of Claim 5 wherein said serial presence detect data includes memory description information.

7. (Original) A multi-tasking bootstrap system of Claim 3 wherein said non-volatile memory includes basic input/output system instructions that direct said processor in performing an interrupt driven initialization of a volatile memory and multi-tasking operations between interrupt operations.

8. (Original) A multi-tasking bootstrap method comprising:

accessing interrupt vector table information stored in a non volatile memory;

initializing a program interrupt controller (PIC);

programming a system management bus controller; and

operating said system management bus controller in a multitasking environment in which said system management bus controller operates in an interrupt driven mode prior to completing volatile memory initialization, wherein said operating said system management bus controller includes retrieving serial presence detect data.

9. (Original) A multi-tasking bootstrap method of claim 8 wherein said interrupt vector table information is accessed when an interrupt indication is triggered.

10. (Original) A multi-tasking bootstrap method of claim 8 wherein said non-volatile memory is a read only memory (ROM).

11. (Original) A multi-tasking bootstrap method of claim 8 wherein said interrupt vector table information is accessed at a pre-memory initialization stage when a system is started up.

12. (Original) A multi-tasking bootstrap method of claim 11 wherein said interrupt vector table information is accessed before completing random access memory initialization.

13. (Original) A multi-tasking bootstrap method of claim 11 wherein said interrupt vector table information is accessed as a processor is performing initial basic input/output system operations (BIOS), including during a power on self test (POST).

14. (Original) A multi-tasking bootstrap method of claim 8 wherein said programming of said system management bus controller includes initializing said system management bus controller.

15. (Original) A multi-tasking bootstrap method of claim 8 wherein said system management bus programming includes slamming system management bus resource addresses.

16. (Original) A multi-tasking bootstrap method of claim 15 wherein multi-tasking operations are executed while processes for retrieving said serial presence detect data are performed.

17. (Original) A multi-tasking bootstrap method of claim 8 further comprising:

providing a location where serial presence detect data is located;

retrieving said serial presence detect data in an interrupt driven mode;

performing multi-tasking operations while waiting for said serial presence detect data to be retrieved; and

generating an interrupt when said serial presence detect data is retrieved.

18. (Original) A computer system comprising:

a display device coupled to a bus;

a non-volatile memory unit coupled to said bus; and

a processor coupled to said bus, said processor for executing a method of multitasking boot up initialization processes, said method comprising:

initializing said processor to access interrupt vector table information stored in said non-volatile memory unit;

initializing a program interrupt controller (PIC);

programming a system management bus controller; and

operating said system management bus controller in a multitasking environment in which said system management bus controller operates in an interrupt driven mode prior to completing volatile memory initialization, wherein said operating said system management bus controller includes retrieving serial presence detect data.

19. (Original) A multi-tasking bootstrap creation process of claim 18 further comprising:

providing a location where serial presence detect is located;

retrieving said serial presence detect data in an interrupt driven mode;

performing multi-tasking operations while waiting for said serial presence detect data to be retrieved; and

generating an interrupt when said serial presence detect data is retrieved.

20. (Original) A multi-tasking bootstrap creation process of claim 18 further comprising temporarily storing serial presence detect data in a processor cache.